

CLAIMS

1. Use of Rev-erb receptors and/or the response element thereof or a functional equivalent of these
5 receptors to screen substances which are useful in the treatment of lipid metabolism dysfunctions.
2. Use according to Claim 1, characterized in that the Rev-erb receptor and the Rev-erb receptor response element are the hRev-erb α receptor and the hRev-erb α
10 receptor response element.
3. Process for screening substances which are useful in the treatment of lipid metabolism dysfunctions, characterized:
- in that the test substance is placed in
15 contact with a receptor of the Rev-erb family and/or a Rev-erb receptor response element, and/or a nuclear factor capable of functionally coupling Rev-erb to the RNA-polymerase complex, or a functional equivalent thereof,
 - 20 - in that the following are measured by any appropriate means:
 - the binding of the said substance to the Rev-erb receptor or the binding of the complex formed from the said substance and the Rev-erb receptor to its
25 response element and/or to a nuclear factor capable of functionally coupling Rev-erb to the RNA-polymerase complex, and/or
 - the modulation of the transcriptional activity of the genes placed under the control of a
30 promoter comprising the Rev-erb response element.
4. Process for screening substances which are useful in the treatment of lipid metabolism dysfunctions, which consists in determining the effect
35 of the test substance on the modulation of the expression of the gene coding for the Rev-erb receptor.
5. Use of a substance selected by a screening process according to either of Claims 3 and 4, for the preparation of a composition, in particular a pharmaceutical composition, which is useful for the

treatment of lipid metabolism dysfunctions associated with apolipoprotein C-III in man or animals.

6. Use of a substance which is capable of binding to the Rev-erb receptor or to the response element thereof, for the preparation of a pharmaceutical composition which is useful for the treatment and/or prevention of lipid metabolism dysfunctions associated with apolipoprotein C-III in man or animals.

7. Use of a substance which is capable of modulating the transcriptional activity of a gene placed under the control of a promoter comprising the Rev-erb receptor response element, for the preparation of a pharmaceutical composition which is useful for the treatment and/or prevention of lipid metabolism dysfunctions associated with apolipoprotein C-III in man or animals.

8. Use of a substance which is capable of modulating the expression of the gene coding for the Rev-erb receptor for the preparation of a composition, in particular a pharmaceutical composition, which is useful for the treatment and/or prevention of lipid metabolism dysfunctions associated with apolipoprotein C-III in man or animals.

9. Use of a screening process according to either of Claims 3 and 4, for the characterization, justification and claim of the mechanism of action of substances possessing anti-atherosclerotic properties using the Rev-erb receptors and/or the response elements thereof, as well as their effect on apo C-III.

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